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ORNITHOLOGICAL LITERATURE

GREAT AUK ISLANDS. A FIELD BIOLOGIST IN THE ARCTIC. By Tim Birkhead. T & A D Poyser, London. 1993: 275 pp., 1 color illustration, 36 black-and-white illustrations, 13 color photos, 25 numbered text figs, including easily interpreted maps, $22.—The title "Great Auk Islands" suggests that the British author's latest book is largely a history of the Great Auks which were depleted to extinction by humans in the past century. The reader soon discovers that, of the book's nine chapters, only one is devoted largely to Great Auks, simply because so very little was recorded on the species' life history, not only at sea, but also at its breeding colonies where slaughtering was wholesale. Many of our seafaring forbearers must have visited the breeding sites, but apparently none among them was curious enough to observe and record the habits of these birds. Not recorded were even the most rudimentary observations on egg-laying times and chick-rearing periods, although one hopes that undiscovered notes on the species will surface some day.

Tim Birkhead left no stone unturned in scrutinizing the literature on Great Auks. His findings, disappointing for lack of factual material, nevertheless capsulize nicely relevant records for the species, including accounts of its heartrending demise. But the main thrust, indeed the soul of the text, is about his scientific studies on the Great Auk's closest extant relatives, especially his beloved Common Murre (*Uria aalge*), called Common Guillemot by Britons. He studied these murres in several localities, but the setting in this book is on a cluster of little-visited "Gannet Islands" off the coast of Labrador, although no Gannets occupy them. After reading, and frequently rereading his findings, I am convinced that few wild birds are better suited to resolving certain biological enigmas. I was astounded to learn that the density of breeding Common Murres on flat terrain far exceeded anything I had witnessed, even among closely nesting penguins. Not in sheer numbers that may reach a million or more at some penguin colonies, but in closeness of incubating birds. An exception is the male Emperor Penguin (*Aptenodytes forsteri*) that holds a single egg on his feet while huddling close together with his neighbors during the frigid Antarctic winter. One of Birkhead's mind-boggling photos (p. 103) shows 76 murre eggs within a single square meter quadrate: the social implication of such densely packed incubating individuals is biologically intriguing. These are the sorts of problems that Birkhead tackles head-on, and about which he later relates his findings in a manner understandable to biologists and non-biologists alike.

Among many captivating topics presented by the author, one that stimulated my curiosity dealt with the shape of the murre's egg which is noted for its extremely pointed little end. Its shape supposedly allows it to spin like a top, rather than roll off a cliff ledge—hence the oft-quoted belief that the evolved shape is adapted to a narrow cliff ledge. Birkhead says one merely has to watch a murre accidently knock its egg and watch it roll into evolutionary oblivion, to realize that the spinning top theory is nonsense. Alas, many of us have perpetuated the myth, hopefully, no longer. This revelation is incentive enough to climb to a murre colony and from a blind experience firsthand these special birds and their eggs.

Conceivably the oddly shaped egg may be adapted to the unusual upright incubating position of the murres with their single central brood patch (fig. 9, p. 93). Razorbills (*Alca torda*), with a rounded egg and lateral brood patches, have a prone incubating posture. Birkhead speculates that the Great Auk, with its pointed egg and single central brood patch, also had an upright incubation posture. One can expand this hypothesis: Emperor Penguins (also the closely related King Penguins, [*Aptenodytes patagonicus*]) incubate upright and have pointed eggs dissimilar to those of other penguin species with prone incubation pos-

tures. Also, like the murres, but unlike most seabirds, the two penguins show alloparental behavior (caring for neighboring chicks), evidently a biological advantage in super densely crowded conditions.

One concludes from this study that murre biology must be among the best documented by field ornithologists to date. Tim Birkhead takes his murre study a step further by reconstructing the life history of the Great Auks through his extensive knowledge of the murres. The result is pure speculation but nonetheless is convincing and is likely to prove out should further records come to light. His clever reconstruction was the highlight of the book for me.

Non-biologists wishing to learn more about scientific methods used by field biologists would do well to read this book. In a delightful manner that most anyone can comprehend, Tim Birkhead introduces biological concepts rarely mentioned outside of scientific journals, e.g., breeding synchrony, egg and chick recognition, kin selection, sperm competition, ecological segregation, and DNA fingerprinting, often crediting pioneer studies to their authors. Considerable parts of the text with accompanying photo illustrations clarify logistical and personnel problems that are often encountered on field expeditions: old hat stuff to experienced field biologists, but probably useful and interesting to the inexperienced. The final chapter entitled "Changes" will fascinate all readers. Following an interval of nine years, Birkhead revisited the Gannet Islands only to find many of its bird colonies devastated by arctic foxes (*Alopex lagopus*). He, as with so many others in similar situations, was faced with an all too frequent dilemma. Should one eradicate the foxes to protect the bird colonies, or does one let nature take its course inasmuch as the foxes were not introduced by humans? No easy solution here.

The text is packed full of art illustrations from start to finish. All 36 black-and-white illustrations by David Quinn are superb and enhance the book immensely. The one of a puffin chick in its burrow (p. 72) is a masterpiece, a technique I found especially difficult to master in trying to illustrate petrels deep within nesting burrows.

The book has a few minor flaws. However, no fault of the author, who includes even the lists of local names of Labrador birds. The continuing problem of deciphering common bird names on both sides of the Atlantic is simply maddening, especially with seabirds. Interpreting what species is a murre or guillemot often becomes more troublesome than the meaningful description of the species itself. For ornithology's sake, Europe and North America should resolve this problem once and for all by agreeing on the common names of birds.

Perhaps, because I came from a United Kingdom ancestry, I am chagrined by Birkhead's insensitive remarks concerning North American women: "The female member—one of those frighteningly aggressive, no-nonsense sort of North American ladies that one occasionally encounters." I interpret this remark to be sexist and above all non-scientific. I also note that he exalts the British Royal Air Force while downgrading the U.S. Air Force. Strange that a first-rate scientist, who almost certainly can command an extraordinary North American audience, would engage in such unprofessional behavior. Other than these puzzling inclusions, I strongly recommend the book for the biologist and non-biologist alike.—David F. Parmelee.

Noms Français des Oiseaux du Monde. (French Names of Birds of the World). By Commission internationale des noms français des oiseaux. Éditions Multimonde Inc., 930 Pouliot, Sainte-Foy, Québec, Canada G1V 3N9. 1993: 452 pp. $39.95 CDN.—Under the co-presidentship of Pierre Devillers and Henri Ouellet, this volume is the first of its kind by an international commission on vernacular names and sets precedents to be followed in other languages, especially in English, where some cleanup of names is needed at the international level. Between 1976 and 1980, Devillers published a series of articles in *Le*